Geese are probably the hardiest and most intelligent of domesticated fowl. They require less care than any other. They can make they own living when not in an adverse environment. But They have many human-like qualities and will respond and do better where well cared for.

There are many species of domesticated geese, and for the most part what is true of one is true of all. In a few small ways, management practices for the White Chinas are different than the best practices for heavier breeds. The Chinas are better grazers. They are heavier layers, laying sometimes earlier, often longer and not infrequently "out of season", meaning at times of the year other than when the days are getting longer. Their laying period is controlled by a number of factors, important among these being nutrition. The judicious use of an adequate breeding ration (similar in composition requirements to that for of other fowl), together with the removal, of eggs from the nests, will contribute to prolongation of the laying period. Male Chinas are also more active. One gander will adequately fertilize the eggs of up to five females.

This is not intended to be either an exhaustive nor discussion of geese management. It is, rather, a commentary, based upon experience and extensive reading of the limited literature by one who has developed both a respect for and fondness of these wonderful creatures. Relatively little has been printed about geese by the United States Government because relatively little work has been done with these fowl in our institutions. Among those which have devoted some time and study [illegible] are the Universities of Minnesota and Ohio, Cornell. The author is unaware of any other. At Sault the Canadian government has conducted considerable research. The largest geese operation in the United States, if not in the entire world, is Stahlman Farms, Los Lunas, N.M., where Chinas are raised and used in the fields and orchards. Mr. Roy Wilson is believed to be in charge of the activities out of this operation. The Magazine of Ducks and Geese, Joseph L. Cross, editor, is the official publication of the American Waterfowl Association. The Address is Box 1880, Milwaukee. It publishes a series of detailed papers on various aspects of goose raising.

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There are many popular misconceptions about geese. One is that the gande are vicious. They can be but they needn't. We have never had a bad gander. We never abuse them in any way, never allow the numerous guests to tease them. We respect their habits and customs and they soon learn to trust us.

Another misconception is that they must have a body of water, especially for recreation and breeding. A few of the very heaviest and more awkward ganders cannot adequately serve their mates on land but even before we made a small, shallow pond, hardly more than a foot deep at the deepest, we never had trouble with fertility. Our geese seem to mate at least as often on land as on the water. With clean running water the geese may be happier. They will certainly be cleaner. But it is not essential if an adequate supply of water for drinking is available. It is customary, where geese are used for weeding row crops, to keep water at the ends of the rows. The geese then eat their way down the rows, get a drink, turn around, and eat their way to the other end.

Feeding geese is very simple. If necessary, they will feed for themselves beginning at birth if good pasture is available. Newly-hatched goslings will eat hay in preference to grain, and can use both, if the hay or grass is short enough not to pack in the digestive system. If hatched by the parents or other fowl (ducks and chickens will generally hatch a higher percentage of eggs than artificial incubation) and allowed to run on the ground, they will start biting grasses, legumes and weeds as soon as they are hungry. Like other fowl, the egg yolk supplies nourishment for up to three days after hatching. Clean table scraps and stale bread are excellent for geese. When available, unmedicated poultry feeds are good, especially for the first six weeks or so or when the geese are being fattened for slaughter. If in the form of mash it should be slightly moistened. Care should be taken to see that moistened feed doesn't mold. We believe "crumbles" are better for young geese, and "pellets" from the third or fourth week, where available at not too great cost. The nutritional requirements of geese having pasture available are, to all practical intents, negligible because they can make out on pasture alone, though they will average perhaps a pound smaller at maturity.

and will not carry as much meat.

However, geese are susceptible to some molds and to botulism. There are other molds they apparently find beneficial. One of these is found in rotting wood. Although practically immune to disease, they get something known as "mad fever" in which they lose their sense of balance and frequently wind up on their backs. Many of these can be saved by slinging them in a burlap bag and feeding, by force if necessary, clean water and soft food. This trouble is rare here. They should not have access to stagnant water. In practice it can be said that geese are disease-free, except for poisons.

Feeding geese can also be sport for adults and children. If hatched in confinement they readily eat from the hand, immediately. Adult geese who haven't already learned the trick can easily be taught to eat from the hand. Generally they are careful not to bite, but the feeder should have respect for the serrated edges of the beaks (mandibles), which look much like a saw and are intended by nature to facilitate grazin

Beginning a little before the breeding season (conduct of the geese indicates this period) and extending through it, supplementary feeding of a breeder ration could be expected to increase both the number and fertility of eggs.

Returning to water, newly/hatched goslings may safely be allowed access to water from which they can emerge unassisted. They will not normally drown, but we have observed that where prevented from leaving the water, Such as by steep sides they can drown. This can also be true of well-grown geese. We have seen adults perish in watering boxes with square sides and even in water-buckets. And until completely feathered on the back, usually delayed until the sixth or seventh week, they can drown in a driving rainstorm. When raised ~~with~~ by the parents this problem can be ignored. It is quite a sight to see a goose shelter, in some cases completely hides her young in a storm. She will also do this when they require warmth. But goslings on their own should be driven under cover during storms. Other fowl can brood goslings, but our observations indicate the goslings haven't the respect for them they have for geese, hence they should be watched.

Grit and oyster shell are considered foods for most poultry but geese have their own ideas about this, as about most other matters. They will usually find the kind of grit they want without the caretaker supplying it. Our experience is they will ignore manufactured grit if they can find their own. Some form of grit is essential to the digestion of coarse foods, but for practical purposes it can be assumed they'll find their own. The calcium in the oyster shell is necessary for good shell formation but apparently geese need less of it than would be expected for we have observed they ignore what we supply.

The goose's gizzard works like that of other fowl. It can be visualized as resembling in action a clenched fist that is rhythmically partially opened then closed. This muscle in effect grinds the food, and the presence of an abrasive such as rough-edged stones, which is what grit is, is helpful.

As with food and water, the housing requirements of geese are simpler than with other fowl. In the Washington D.C. area, geese require no housing during the most severe winters. It is desirable that they have a windbreaker and anything they can go under, if they want shelter ~~if they desire~~. We find that with a foot and a half of snow on the ground, they prefer to avoid accessible buildings, although they will occasionally go under a building. In the heat of summer, they do like to take shade under a tree occasionally. Goslings raised by the parents have no housing requirements. Those raised in by themselves should have some simple brooding. When hatched they should be kept close to a source of heat of about 90 degrees. This requirement is reduced about 5 degrees a week. Practically, they require no heat after three weeks. At almost any age they can be allowed to run out if it is colder once they learn the spot to which they can ~~[illegible]~~ return to at some time if they need to. We have found that, even in the cold Washington March weather, three-week-old goslings confined to an unheated box at night are warm enough outside. They supply their own heat which a box on its side conserves. Yet they get enough fresh air for health. They can be confined by the simplest fences which need be only as high as they can reach. They have, however, a facility for going through or under fences. One-inch mesh poultry netting, if avail-able, supported by a few stakes, is sufficient. Cardboard also works well, until r Turkey wire (this is the material in which the geese were crated) requires no suppo if it is not set out too tight.

If nights are cool, any source of slight heat is adequate. We have put a small electric light bulb in a tin can and the goslings settle around it comfortably. But when goslings are confined, they should be moved frequently because their body wastes are quite moist and either their pasture will be packed and inedi or they and their boxes will become foul. If kept in a box indoors, the bottom of the box should be lined with newspaper which can be changed as necessary. Also, care should be taken with confined goslings to thwart their desire to get into their drinking water. A simple device is to use a bowl, where manufactured equipment is not available, and put a weighted tin can in the center, allowing enough clearance for the gosling's head. The edge of the bowl should be approximately the height of the goslings back to prevent as much water wastage as possible. While geese are used to a wetter environment than chickens, if they are confined it is considerably better to keep them as dry as possible for the same reasons and for an additional one: they can get "spraddle-legged". If their legs do tend to spread sideways, this can be corrected by binding them together, loosely, with a rag but not with a cord that cu into their flesh. A reasonably firm footing will prevent this problem. We have never observed it among goslings reared by other fowl on the ground. It is relativ rare among confinement-raised goslings.

4 Another slight problem usually restricted to confinement-reared goslings but occasionally found in older geese is called "dropped wing". The outer section of the wing twists outward and becomes too heavy for the gosling or goose to carry in the normal position. Prompt taping of the wing in its normal position for a few day